6. Budael Plan

Salarius

Application for Research Grant

reimened representa

Cyerhead

i dominin

Date:

December 29, 1955

1. Name of Investigator: Francis C. Lowell, M.D. (1)
7. And report O ration of Worldliam Frankbin, M.D. (2)

2. Title: (1) Hember, Evans Memorial, Massachusetts Memorial Hospitals (1) Heritage Associate Professor of Medicine, Boston University School of Medicine (1) 3. Institution: Carried Evans Memorial (1) 10 65 East Newton Street (1) 10 65 East Newton

- Ad adulthonal resultinance for token study and numbers of about an timber college.

5. Detailed Plan of Procedure (Use reverse side if additional space is needed): Significant pulmonary disease, 10. Additional information relation of work to other projects and other Significant pulmonary disease, 11. Often unrecognized by the subject, may exist in the absence of physical and x-ray findings. ozThis is especially true for bronchial asthma and pulmonary emphysema. The associated hafunctional abnormality in these conditions as well as restrictive disease may be readily Adetected with the expirogram, a kymographic tracing of a maximal forced expiration (1). belie procedure, done before and after the administration of a bronchodilator drug, resequires little time and a minimum amount of instruction for the subject. We have arderanged to carry out this study in an industrial plant in this vicinity which employs approximately 2,500 persons, and have siready obtained the required apparatus. Each subject is to fill out, with assistance if nacessary, a detailed questionnaire* which includes a section on occupation and smoking as well as a section on respiratory. cardiac and gastreintastinal symptoms. All the above information and the test of pulmonary function will be gathered in conjunction with an annual physical examination which Mincludes wakes urinalysis, routine examination of the blood and x-ray of the chest. This study is already under way. We are applying for funds to make possible proper execution cof the test of pulmonary function, accumulation of complete data and detailed analysis of

(1) Clinical value of a tracing of forced expiration (expirogram). I. Pulmonary function. Franklin, W., Michelson, A.P., Lowell F.C. and Schiller, I.W. N. Eng. J. Med, 253: 799-808, (Nov. 10) 1955.

* Prepared with the assistance of Mr. John Alman, Director of Statistical Research Services, Boston University

1003541428

o/ Philip D. Bonnet, M.B.

TOBACCO VERMON

Salaries
Expendable Supplies
Applicative manent Equipment
Overhead
Other

\$6,000 1,000 (10%) 900 2,000 Total \$9,900

7. Anticipated Duration of Work to 2 years (2)

Significant Posten University

8. Facilities and Staff Available. Facilities include the Medical Depti of an industrial plant employing approximately 2,500 persons. Additional to the programs has been obtained. Analysis of the data is to be done by the Statistical Research Services of Boston University. The Medical Dept. of the industrial plant is staffed by 2 or more physicians, 5 nurses and 2 technicians. The request for salaries mentioned under (6) does not include personnel already employed in the Medical Department. One of us (Wm. Franklin, M.D.) is in regular attendance twice weekly and is in a position to supervise the performance of the tests and the collection of data. In addition, secretarial, technical and laboratory facilities are available in the Evans Memorial for special procedures as they may arise. The secretarial and laboratory facilities are available in the Evans Memorial for special procedures as they may arise.

A No additional requirements for this study are anticipated at this time.

10. Additional Information (Including relation of work to other projects and other sources of supply). The plan described is an extension of a continuing study of obstructive pulmonary disease which has been in Ages progress in this division of the Evans Memorial for a number of years. These researches have been supported by the Evans Memorial and in addition by grants from the U.S. Public w Health, Service, and, from Pharmaceutical Companies, The current, study, described, herein is, being supported in part by the Evans Memorial and space, some technical help and certain supplies have been provided by the industrial plant concerned. The apparatus has been donated by Warren E.; Collins Co. of Boston supply where he man we have by writing and the new true approvidentially authorise contracts and these already eachiese for received observation. That out-There is the first party of the specialization of consequences a contailed quantiform which tactivida à luggida di peritativa ara modifie de mall de a portion de rougeraficale. uphylika hal garlevintumilian almodom. All tid abom informatica and this hade at milprocessy functions will be calcaded in conjunction aith an annual propagat, whose bother union Estimated Funds Needed your associate examination of the blood end sense of the states This and desired greater distance and terms for furth for any one symptomic appropriate the property of the property Recorder of data.....3,000 Statistical analysis of data2,000 Equipment and supplies. 1.000 of forced expiration (confragram). To Fairmary America. Proceedings and Make 1909,000. Towall followed bould for the Sand Sandillow, Lotton No. 1819. In 1914, 1922. 70%。年初,150%。101-125%。 s/ Francis C. Lowell Signature_ * Programme at the the archetonam of the Island Alexand alternative of Stationical America

s/ Philip D. Bonnet, M.D.

Salaries
Expendable Supplies
Permanent Equipment
Overhead
Other

ited Duration of Work 111 to 2 year

s and Staff Available, Facilities include the Medical Depts of an industrial plant approximately 2, 500 persons.

approximately 200 the septrograms has been obtained, smalyers of the data is to for carrying but the statistical fasearch Services of Ebston University? The Resical Dept. of rial plant is staffed by N or more physicians, ourses and 2 technicians. The real rial plant is staffed by N or more physicians, ourses and 2 technicians. The real results of the order of the secretary of the Win. Franklin, N.D.) is in regular attendance twice is in a the test and the collection in addition, secretarial, technical and laboratory facilities are svallable in Neartlal for special propedures as they may arise.

ional requirements for this study are anticipated at this time.

ional Information (Including relation of work to other projects and other sources of supply). The plan described neigh of a continuing study of obstructive pulmonary disease which has been in a this division of the Evans Memorial for a number of years. These researches supported by the Evans Memorial and in addition by Grants from the U.S. Public vite and from Pharmaceutical Companies. The turnent study described herein is orted in part by the Evans Memorial and spaces, some technical help and certain or the movided by the industrial plant concerned. The apparatus has been warren E. Collins Co. of Boston.

1003541430

Punds Needed

Samuel 1

data.
3,000
analysis of data2,000
analysis of data2,000

100 P

Francis C. Lowell